

## Claims

- [c1] 1. A vacuum tube having an anode/collector coated with a material comprised of carbonized resin.
- [c2] 2. A vacuum tube having an anode/collector coated with a material comprised of carbonized resin and a final thin film of pyrocarbon material deposited by chemical vapor deposition.
- [c3] 3. A method of coating an anode/collector used in a vacuum tube, the method comprised of:  
coating the anode/collector with a thin film of carbon;  
coating the anode/collector with a carbonizable resin;  
baking the anode/collector to totally carbonize the resin;  
depositing pyrocarbon material by pyrolysis through chemical vapor deposition;  
and  
baking the anode/collector in a vacuum oven to remove any remaining water.
- [c4] 4. The anode/cathode coating method of claim 3, wherein the carbonizable resin is baked at a temperature of at least 700 degrees centigrade.
- [c5] 5. The anode/cathode coating method of claim 3, wherein the carbonizable resin is a phenolic.

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